Amendments to the Claims:

1.   (Currently amended) A computer-implemented method for distributing parts to customer locations ~~in a volume-based fair share mode~~, the method comprising ~~the steps~~:

using a processor to prioritize requests for parts from inventory;

using the processor to prioritize customer locations that have need for the parts to create priorities for the customer locations; and

using the processor to form a shipment plan by iteratively[[:]] assigning a defined minimum size allotment of the parts to a customer location having a current highest priority and then reprioritizing the priorities of all locations and again assigning the defined minimum size allotment of the parts to a customer location having a new current highest priority,~~; and re-assigning the priorities of the customer locations~~ until one of all of the parts from inventory have been assigned and[[or]] no customer location needs more of the parts assigned, wherein each current highest priority is determined from all locations for each iteration.

2.   (Original) The method of claim 1, further comprising defining the minimum size allotment.

3.   (Currently amended) The method of claim 2, wherein each customer location having a need for the parts from inventory has a percentage need for said parts, and wherein the ~~step of~~ forming a shipment plan includes assigning the minimum size allotment to a highest priority location in each iteration and thereafter re-assigning the priorities such that each customer location having a need is driven to the same percentage need.

4.   (Original) The method of claim 3, further comprising performing a pallet size pass on the shipment plan.

5.   (Original) The method of claim 4, wherein the pallet size pass is based on a threshold quantity at which multiples of shippers are cut in full pallets.

6.   (Original) The method of claim 5, wherein the pallet size pass is based on a pallet quantity that is a quantity of parts that constitutes a full pallet.

7.   (Original) The method of claim 6, wherein each shipper that passes through the pallet size pass has a number of parts greater than the threshold quantity and equal to or less than the pallet quantity.

8.   (Original) The method of claim 4, further comprising performing a volume based filter pass on the shipment plan.

9.   (Original) The method of claim 8, wherein the volume based filter pass is based on a minimum shipment quantity defining a smallest amount of parts for a specific location or part type.

10.   (Original) The method of claim 8, wherein the volume based filter pass is based on a percentage impact threshold that is a function of a recommended shipper and a target inventory for a specific location or part type.

11.   (Original) The method of claim 8, wherein the parts are shipped from a single source.

12.   (Currently amended) The method of claim 8, wherein the parts are shipped from multiple sources, and further comprising determining a splitting of the shipping of the parts among the multiple sources to fulfill the requests for parts from the customer locations.

13.   (Original) The method of claim 12, wherein the determining includes forming a balanced supply/demand.

14. (Currently amended) The method of claim 13, wherein the determining further ~~comprises using~~includes geographic/local sales rules in which specified geographic and local sales shipments are prioritized over optimization of shipments.

15. (Currently amended) The method of claim 14, wherein the determining further ~~comprises using~~includes a business rule filtering in which specified business rules are prioritized over optimization of shipments.

16. (Previously Presented) The method of claim 15, further comprising creating a set of supply demand scenarios with combinations of fully providing available supply to a demand point in a matrix, and subsequently performing a sum of squares on the matrix, with the highest sum of squares forming a part of said shipment plan.

17. (Currently amended) A computer readable medium bearing programming instructions, which, when executed by a computer, cause the computer to perform a method to determine distribution of parts from inventory to customer locations, said method comprising ~~in a volume-based fair share mode according to the steps~~:

    prioritizing requests for a part from inventory by the customer locations based on the part, a priority need for the part, and inventory available to ship;

    prioritizing the customer locations that have a need for the part to create priorities for the customer locations; and

    forming a shipment plan by iteratively:

        assigning a defined minimum size allotment of the parts to the customer location having a current highest priority and then reprioritizing the priorities of all locations and again assigning the defined minimum size allotment of the parts to the customer location having a new current highest priority, until one of all of the parts from inventory have been assigned and no customer location needs more of the parts assigned, wherein each current highest priority is determined from all locations for each iteration; ~~and~~

        ~~re-assigning the priorities of the customer locations.~~

18. (Currently amended) The computer readable medium of claim 17, <u>wherein the method further comprises performing</u> ~~the medium bearing further programming instructions to cause the computer to perform~~ lot sizing optimization after the shipment plan is formed.

19. (Currently amended) The computer readable medium of claim 18, <u>wherein the method further comprises splitting</u> ~~the medium bearing further programming instructions to cause the computer to split~~ the shipping of the parts among multiple sources of the parts.

20. (Currently amended) A system for determining distribution of goods to customer locations, comprising:

a processor that receives requests for parts to be delivered to customer locations; and

means for forming a shipment plan of the goods to said customer locations<u>, by iteratively assigning a defined minimum size allotment of the parts to a customer location having a current highest priority and then reprioritizing the priorities of all locations and again assigning the defined minimum size allotment of the parts to the customer location having a new current highest priority, until one of all of the parts from inventory have been assigned and no customer location needs more of the parts assigned, wherein each current highest priority is determined from all locations for each iteration</u> ~~on a volume-based fair share basis, including re-assigning priorities of customer locations following assignation of a defined minimum size allotment of the parts to the customer location having a current highest priority~~.